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## StageBug SB-5

### Nominated for TEC award!

Radial has secured a nomination for the 29th annual TEC awards for Outstanding Technical Achievement. The StageBug SB-5 Laptop DI is designed for quick deployment on busy stages and for the fast-paced environment of the AV system tech.

The StageBug series of compact DIs features the SB-1 Acoustic, SB-2 Passive, SB-4 Piezo, SB-5 Laptop DI, SB-7 EarMuff and the SB-48 Power Bar.

Making its world debut is the SB5W-WallDI - Like the nominated SB5, the WallDI is a two channel passive direct box with level control only this time, built into a standard electrical wall plate for AV installations. See page 4 for more details.

## Introducing the Bassbone OD (Overdrive)

### The next generation Bassbone is here!

The Bassbone OD is a power-packed command center for bass instruments of all kinds! This next generation Bassbone has two full-feature channels, an overdrive circuit, direct box, effects loop and headphone out. Ideal for top-level bass players or weekend warriors who want the best. Several world renowned bassists have given the new Bassbone a test run.

To see what Victor Wooten, Mark King and Danny Miranda have to say about it turn to page 5.

## Headload™ Guitar Amp Load Box

### Finally a load box that delivers!

For more on the Headload see page 6

Also making its debut is the Headload. It is a 100% discrete guitar amp load box that lets you attenuate the output of the guitar amplifier so that it can be driven hard for improved tone without being overly loud on stage or in the studio. The built-in JDX DI box and Phazer (phase correction tool) can create unequalled guitar tones. Also features a built-in headphone amp that lets you quietly practice without disturbing the neighbors!

## Space Heater™ 8 Channel Tube Summer

### Add character to your digital recordings

For more on the Space Heater see page 7

New at NAMM is the Space Heater a combination eight channel tube drive and summing mixer designed to bring character to the sterile world of digital recording. This eight channel twelve AX7 tube line amplifier features Eclipse transformers that combine to produce a huge bottom end. A three position switch lets the user select the applied voltage on the tube so that it can be lo-fi, mid-fi or hi-fidelity.



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# The exciting new Voco-Loco™

## Add effects to your voice, trumpet or sax!

Radial is pleased to announce the Voco-Loco, a combination microphone preamp and effects loop that enables a lead vocalist, horn player or blues harp to incorporate effects into their signal path. Just like an electric guitarist adds pedals for soloing such as delay, reverb or distortion, this option is now available to anyone's performance by engaging a simple footswitch.

Award winning composer/producer/instrumentalist Vince Mai has already put the Voco-Loco to the test: *"I'm really gassed about the Voco-Loco because it is changing the way I approach electronics with my horn. As a horn player, the primary thing we work on is our personal sound. We are very attached to how we sound and spend years developing our voice. When you connect directly into guitar pedals, your sound degrades. What the Voco-Loco does for me is allow my true sound to be sent through to the PA system. I can then add as much of the effects as I see fit for a given song or musical passage."*

The design begins with a high-performance preamp section that delivers over 60dB of gain, more than enough to adapt to virtually any microphone. Radial's unique Accustate level control automatically sets the gain and sensitivity via a dual wafer potentiometer for improved signal-to-noise. A simple two band shelving EQ lets you add bass or accentuate the highs to enhance. The signal then feeds an effects loop that has been optimized for guitar pedals via standard 1/4" guitar jacks. Separate send and receive controls let you adjust the levels going to the pedals to reduce distortion and optimize the signal path. A tone control on the return path can then be used to tame overly bright pedals for a smoother more natural tone, while the wet/dry blend control enables the artist to mix in as much of the effect as desired. The Voco-Loco's output is fully balanced and able to drive a typical mixing console input.

Two footswitches are top mounted. The right hand footswitch is used to turn on or off the effects loops while the left-hand footswitch can be used to either mute the Voco-Loco output (to turn off the mic when not in use) or it can be assigned as a 100% wet loop. You could, for instance, create a weird telephone effect with all of the sound passing through a distortion pedal or toggle the signal so that a blend of the unprocessed voice plus some reverb can be heard together. A 180° polarity reverse switch ensures the pedals are in phase with the original signal when the wet/dry blend is in use.

Measuring only 5" x 7" (12.7cm x 17.8cm), the Voco-Loco is exceptionally compact to fit on any pedalboard. It comes equipped with an external 15VDC supply.

*Award winning composer, producer and instrumentalist Vince Mai.*
*Voco-Loco Part# R800 1425 00 Retail: $300 USD*

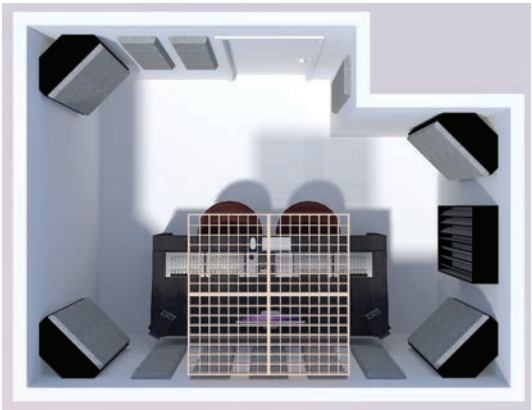
*Add echo, chorus or wah to your sax or trumpet to make your solos stand out from the crowd and deliver a unique performance to the audience that they will never forget!*

# Primacoustic now on Sketchup

## Full line of acoustical treatment products in Sketchup's library

Sketchup is a popular 3D modeling program that is widely used by designers in a variety of fields to create layouts and models. Primacoustic Product Specialist Jay Porter: *"Primacoustic has been using the software to assist customers with acoustic treatment layouts and basic design for over 5 years. We have amassed a collection of 53 Sketchup models representing our entire product line. Sharing these components with the general public via Sketchup's Component Library will allow end-users, architects, interior decorators and acoustic designers to access Primacoustic products and incorporate them into their designs. This allows you to create a realistic representation of the acoustic product in the room or acoustic place and really gives you a feel as to the final visual outcome."*

*"Ultimately, our goal is to take the mystery out of acoustics by making great sounding rooms possible and accessible for everyone. It's actually very easy! With some good old fashioned common sense and a bit of planning, anyone can take a bad sounding room and make it sound great."*



*Home studio designed in Sketchup featuring Primacoustic panels, traps, clouds and diffusers.*



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# Two new footswitches: the JR-1L and JR-1M

*Part# R800 2082 00 (JR-1L), Part# R800 2080 00 (JR-1M) Estimated Retail: $70 USD*

## Latching or Momentary footswitches feature XLR connectors

The JR-1 remote is a compact footswitch that is available in choice of latching or momentary formats.

According to Radial's Senior Engineer Dan Fraser: *"The thing about R&D is that once you get started on a project, it is almost like opening up a rabbit hole. As you dig deeper, ideas begin to surface and the next thing you know, the product morphs in both size, features and of course application. When developing the Relay Xo it became abundantly clear that we had to produce a remote footswitch control with XLR connectors. Professional touring bands prefer these over guitar cables as they lock into place. The JR-1 is an incredibly simple device that is purpose driven and does exactly what it is supposed to do: make something switch."*

The compact JR-1 features choice of XLR and ¼" remote outputs to suit various setups and can be ordered with choice of a latching or momentary footswitch. As the JR-1 is completely passive, no power is needed to make it work. One simply plugs in and stomps.Made from 14 gauge steel with baked enamel finish, the JR-1 is made tough to handle the rigors of professional touring. As with all Radial products, the JR-1 is made in Canada and comes with a 3-year transferable warranty. The JR-1L and JR-1M will start shipping in March 2014.

# The second generation SW8 is now shipping

*Part# R800 8100 00 Retail: $1350 USD*

## New features make it easier to use

The SW8 is designed to switch 8 audio channels simultaneously. Backing tracks are recorded on two separate systems and each is sent to the SW8 where the user may manually select between the playback systems or have the SW8 automatically switch between them when a drop-out occurs via an internal gate. Inputs include a choice of 1/4" TRS or 25 pin D-subs. The outputs can be via a series of transformer isolated XLR outputs to run through a snake system or a D-Sub.

According to Radial's President Peter Janis: *"Over the past several years, the Radial SW8 has gained tremendous market penetration with major tours such as The Eagles, Rush, Rihanna, Maroon 5 and Cirque Du Soleil all using it. During this time we have had many discussions with the technicians who use the SW8 on a daily basis. This input has driven us to develop a next-generation switcher that will elevate the performance in several key areas such as managing standby status more effectively, muting the main audio outputs to enable on-the-fly editing and providing remote controllability with LED status indicators."*

New features include: A 'standby' function that enables the technician to stop the show in between songs when the artist chooses to speak to the audience. A global mute turns off the front panel XLR outputs allowing the tech to monitor playback tracks and prepare playback cue points. Two signal status LEDs have been added for both A and B playback systems providing visual indicators to show signal present. External remote control options now include either a footswitch or desktop options with LED status indicators. To help eliminate switching noise with less than ideal sources, a series of DC blocking filters have been added on all channels. Gate level controls have also been relocated to the front panel for easier manipulation.

# Show and Tell

## ARTIST FILE: TONEBONE

### Eric Jarrin
### HEAVEN'S CRY

*"For the live part of this new release, all the shows we did overseas and even here for our album launch show, Pierre and I put all our trust in Radial's Plexitube Tonebone pedal."*

*"We have this pretty cool setup where everyone has an in-ear monitoring system so we can travel light without any band back-line. We tried to find a way to have the best guitar tone without playing with a big high gain tube stack. The answer is the Tonebone Plexitube. It's the only thing we tried out that delivered the same qualities of a high gain tube amp cranked up in a tiny metal box. It's just amazing. No more huge stack of amps to carry around on every stage we step foot on. And trust me, we are very picky about guitar tone and the Plexitube delivers."*

### Rubens de la Corte

*"Performing is something that connects me to the listener at a different level. It is pure satisfaction. I have to perform to be myself. I just love the PZ-Pre to play live. It is part of my sound and it improved my tone since I started to use it. Compact, convenient, it is easy to use and it gives me all the different sound nuances I want."*



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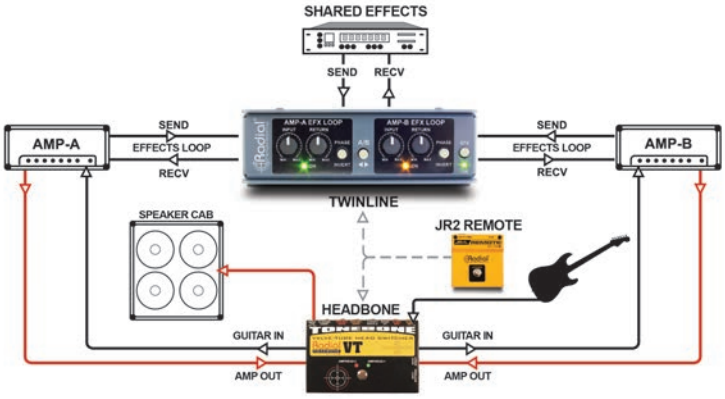
# The Twinline Effects Loop Router

*Estimated Retail Price: $400 USD*

## Share your pedalboard between two amp heads

*The Twinline will be available in April 2014.*




According to Radial Customer Service Manager Catharina Taylor: *"We have received numerous calls and emails from musicians asking how they can better manage their pedals when using two amps. Many guitarists prefer to route their effects pedals through the amplifier effects-loop as opposed to connecting them in-line in between the guitar and the amp. This generally produces better signal-to-noise and eliminates the problems associated with true-bypass and non-true-bypass pedals. This, however, introduces a new problem when using two amplifiers: How do you share the effects between the two amps? The Radial Twinline is basically a router that lets you select between the active amplifier head's effects-loop and automatically switches the effects so that they follow in tandem. When used with the Radial Headbone, you can toggle heads and reroute effects in a single foot stomp!"*

The Twinline begins with two effects-loop connections for the two amps, each of which is equipped with send and receive ¼" jacks along with individual send and receive level controls plus a polarity reverse to ensure the amps and pedals are in phase with each other. A third send and receive effects-loop is then used to connect to the pedalboard using ¼" hi-Z jacks or balanced lo-Z XLRs for use with studio-grade professional line level effects. In effort to eliminate hum causing ground loops, the two amplifier effects-loops are 100% transformer isolated and supplemented with ground lift switches. Switching between the loops may be performed using the front panel AB switch or via the optional JR2 remote control. The JR2 is equipped with two footswitches whereby the first is used to select the amplifier effects-loop and the second is used to bypass the effects altogether. Bypassing the effects is done via gold contact sealed relays for true-bypass signal flow. Using the remote control is particularly advantageous as it allows the Twinline to be positioned adjacent to the amplifiers, eliminating a tangled mess of spaghetti!

As with all Radial products, the Twinline is made in Canada using heavy duty 14 gauge steel. A recessed front panel creates a protective zone around the knobs and switches to keep them safe from overly zealous roadies. A full bottom no-slip pad allows the Twinline to be positioned on the guitar amp without fear of it sliding off. Powering is done with the included 15VDC power supply.

# The SB5W 'Wall DI' - Wall Mount Direct Box

*Part# R800 0155 00 Estimated Retail Price $140 USD.*

## Introducing Radial's First DI Box Designed for Permanent Installations

According to Radial Export Manager, Steve McKay: *"Just when you think you have seen every DI box ever to be made, those crazy engineers keep on coming out with new devices that seem to hit a certain market or demographic. The SB5W is one of those. Just imagine you have a laptop computer in a boardroom or conference center and you want to send the audio through to the PA system. The SB5W is the perfect solution! Affectionately known as WallDI - it mounts inside a standard electrical box and employs an off the shelf Decora plate. You plug in, adjust the volume and your Power Point video comes alive!"*

The SB5W is a stereo direct box that fits inside a standard light switch electrical enclosure and employs a Decora wall plate cover for the fit and finish. As the design is completely passive, no local powering is needed. Choice of RCA or 3.5mm mini TRS inputs make it easy to interface to laptops and iPhones. A simple level control sets the output. This is augmented with a set & forget switch to sum the stereo audio file to mono plus a ground lift to eliminate hum and buzz caused by ground loops that often appear when interfacing computers and video projectors with professional audio equipment. Connections from the SB5W are done with simple screw-down terminals and tie wraps for strain relief. Made in Canada from 16 gauge steel, the electronics are fully enclosed in a metal casing to reduce susceptibility from outside magnetic interference. Plug and play easy to use, the SB5W's estimated shipping date is March 2014.



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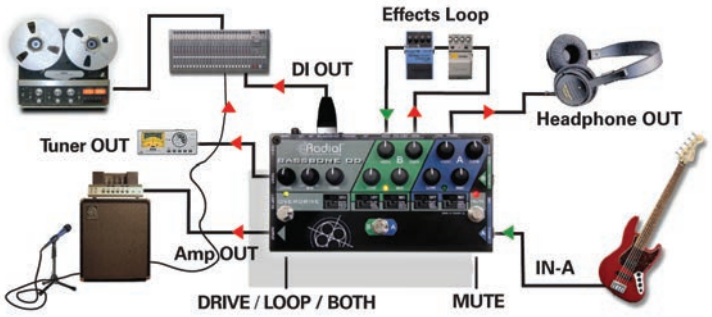
# The Bassbone OD™

*Part# R800 7072 00 Estimated Retail Price: $500 USD*

## Next generation Bassbone Overdrive




According to Radial President Peter Janis: *"Since we launched the Bassbone a decade ago, it has become one of the most successful bass preamps on the planet, having been adopted by many of the world's top bassists including Marcus Miller, Victor Wooten and Tony Levin just to name a few. Over the years, we have had many conversations with artists on how we could improve the Bassbone. Some of the requests we received included a mute footswitch for quiet tuning, the ability to have the effects loop active at all time and the option to elegantly switch between passive, active and upright basses."*

*"We also had many conversations regarding the use of distortion on bass - including the type of overdrive bassists would like to use and more importantly, what typically does not work when applying overdrive or distortion to bass signals. We quickly discovered that in order to deliver a solid bass foundation and the natural tone of the instrument, you have to maximize the frequency response, retain the dynamics and introduce the ability to 'mix in' the dry original signal with the distortion. And once we got started... well, we kept on going until we got it right!"*

The Bassbone OD is a bass preamp with two instrument input channels, each of which is fully equipped with level control, a semi-parametric equalizer and low frequency resonance filter. Channel-1 is further equipped with Drag™ Control load correction to optimize the tone and feel when using a vintage passive instrument such as a Fender bass. Channel-2 takes a different slant with a PZB booster that increases the sensitivity and load to 10 meg ohms to optimize it for use with piezo transducers as commonly used on upright bass. Toggling between channels is done using a footswitch and both channels may be mixed together by depressing the blend switch should a dual pickup system be in use. Outputs include a ¼' instrument level output to feed the on-stage amplifier plus a low-Z balanced Radial DI box output to feed the PA system. The XLR output can be assigned pre or post effects to suit the engineer's preference. A separately buffered tuner output works with the mute footswitch for quiet on-stage tuning.

For bassists who employ effects, both input channels can share the same pedals by connecting via the built-in send & receive effects loop. This is augmented with an on-board bass overdrive with control over the drive level, tone and a wet-dry mix that lets you add slight grit or over the top distortion to the signal path. The OD footswitch may be assigned to the loop, overdrive or both. Finally, a built-in headphone amp with 3.5mm output lets you use the Bassbone on the bus for those long drives between gigs. The Bassbone OD will start shipping Spring 2014.

*"Mother of God!! what a frickin' awesome pedal…thank you! I've been jamming on it for 2 hours and haven't even bored myself yet."*

Mark King, Level 42

*"I think this unit is brilliant.You guys scored a major home run on this ! I haven't even dug deep on the effect loops and various outputs. You guys thought of everything. But most importantly, this sounds AMAZING!!"*

Danny Miranda

*"I've been a long time user of the original Bassbone. It's hard to believe that Radial could make it even better, but they did it. The Bassbone OD is my new choice."*

Victor Wooten

# The new ProMS2™ Mic Splitter

*Part# R800 1122 00 Retail: $140 USD*

## High performance audio at an affordable price

The new Radial ProMS2 is a single channel mic splitter designed for PA, recording and broadcast applications.

According to Radial's Production Manager Steve Hopia: *"Radial has been building custom mic splitters and snakes for over 20 years. More recently, the Radial OX8 has gained notoriety as the mic splitter of choice with artists as diverse as Rush and U2 when recording live performances. We felt that it was time that we made a single channel version of the OX8 that could be used for general PA applications and installations where high performance is needed at a more affordable price point. The ProMS2 delivers in spades!"*

The Radial ProMS2 is completely passive and 100% discrete to ensure optimal signal flow. The engine inside is an Eclipse ET-MS10 transformer that is exceptionally linear from 20Hz to 20kHz while exhibiting less than 0.01% distortion at 20Hz. The Eclipse transformer is equipped with a mu-metal can that shields the sensitive circuit from outside electro-magnetic fields to ensure the signal is delivered without artifact.

Features include microphone input with -30dB pad to enable extra high level sources to be used without fear of saturating the transformer. There are three outputs: The first is a direct-coupled output that is normally connected to the main FOH PA system mixer and provides a return path for 48V phantom power should a condenser mic or active DI box be in use. The second is a transformer isolated output that is particularly adept at eliminating the hum and buzz caused by ground loops. The third is a direct output with a ground lift switch. This auxiliary output can be used to feed the stage monitors, recording system or remote broadcast truck.



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# The Headload ™

*Part# R800 2025 00  Estimated retail: $600 USD.*

## Guitar Amp Load Box With Built-In JDX DI™ and Phazer ™ Phaze Adjustment Tool

*The Headload will start shipping in Spring 2014*

According to Radial President Peter Janis: *"With the proliferation of in-ear monitors, there has come a tremendous need for reducing sound pressure levels on stage. Outside of drums, the next biggest culprit is the guitar amplifier. To get tone, guitarists like to drive their amps hard. This is particularly true for smaller amps that sound great when pushed to the max. Having tried all kinds of load boxes - we have never been all that impressed with the ones currently on the market. Although they all reduce the sound level coming out of the amp, they fall short when it comes to producing a usable signal for the PA system. We felt that if we could leverage the incredible success we have enjoyed with the Radial JDX direct box and combine this with the Phazer phase adjustment tool, a new type of load box could be created. After a year of trial and error, we are pleased to announce the Headload - the culmination of our quest for great amp tone."*

The 100% discrete fan-cooled design begins with a series of high power cement-encrusted epoxy-coated copper coil resistors that are used in conjunction with a 6-position Grayhill rotary switch to dissipate the power generated by the amplifier. A variable range control allows incremental power reduction at low levels if needed. This is augmented with separate high and low resonance switches to compensate with extra sparkle or bottom end. Power going to the speakers may also be turned off for quiet recording or to eliminate the speaker cabinet on stage. A front-panel ¼" headphone jack with level control makes the Headload the perfect companion for quiet practicing.

In addition to the 8 ohm speaker cabinet outputs, the Headload comes with a built-in Radial JDX direct box. The JDX has gained tremendous notoriety with artists including Megadeth, Sting, Rascal Flatts, Aerosmith, Radiohead and Evanescence often replacing the guitar and bass amp microphones. This is coupled with a 6-position voicing switch that lets you choose the desired amp and cabinet emulation. This is supplemented with a 2-band EQ for fine tuning and a low pass filter to eliminate overly harsh harmonics that are produced by some amplifiers. Two JDX direct outputs offer the choice of pre or post EQ settings to allow the artist to control his wedge or in-ear monitors to suit while sending a non-equalized tone to the front of house mix position. For engineers who prefer to combine a microphone with a direct feed, the Headload has also been outfitted with a Radial Phazer - phase alignment tool. This enables the stage tech to align the direct feed with the mic and dial-in the ideal mix on stage. In the studio the Phazer can also be used for creative equalization such as creating Boston-type out-of-phase rhythm tones or an ultra-thick wall-of-sound. A second set of ¼" line outputs may be used to feed additional stage amps or effects if needed. The Headload is made in Canada from 14 gauge steel and is supported with a 3 year transferable warranty.

## Included inside the Headload!

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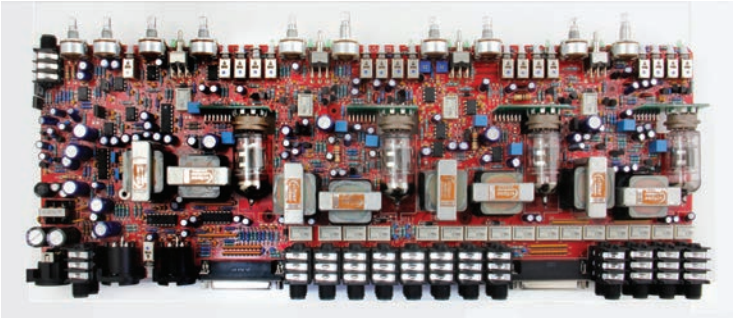
# The Space Heater ™

*Part# R800 7005 00  Estimated Retail Price $2000 USD*

## Eight channel 12 AX7 Tube Line Amplifier with Eclipse Transformers



According to Radial President Peter Janis: *"Ever since the success of our Workhorse 500 series power rack with built-in summing mixer, we have been thinking about building a dedicated summing mixer that would be a worthwhile addition to the industry.  As there are plenty of passive analog summing mixers on the market, we wanted to bring something out that would be both unique and of value.  While talking about how many producers prefer to fatten up the sound of drums using analog recorders, it occurred to us that it would be really cool if you could add tube coloration and transformers to a drum track. So we got to work! The Space Heater is an 8 channel 12 AX7 tube line amplifier with big fat Eclipse transformers. These combine to produce a huge bottom end. We then added a 3 position switch that lets the user select the applied voltage on the tube so that it can be lo-fi, mid-fi or hi-fidelity, depending on the need. It is fun, easy to use and I am sure it will be welcomed by the more adventurous minded producers and engineers."*

Set up as four stereo pairs, the Space Heater design begins with a choice of 1/4" TRS or D-sub inputs for quick connection to a workstation. Each channel pair is 100% discrete enabling 4 stereo sets to be used independently or be sent to a stereo mix bus with left and right outputs. To control the effect on the tube, each channel set is equipped with a separate drive control to increase or decrease the signal being sent to the 12AX7 tube and a level control to set the output. A unique Heat switch lets the user apply 25, 50 or 100 volts on the tube depending on the fidelity needed. Lower voltages starve the tube causing more distortion.  On the other hand, higher voltages produce a cleaner signal. Each stereo set is also equipped with a handy high-pass filter to help eliminate resonance and clutter. This is extremely useful for cleaning up a mix.  To expand patching options, all 8 channels are equipped with separate send and receive insert jacks. The send jack works double duty as a second output with the D-Sub for parallel processing. The master section features a simple level control, headphone amp and choice of XLR or TRS outputs. Everything is housed in a 1 RU 19" rack frame and as with all Radial product, it is made from 14 gauge steel for greater rigidity and maximum shielding. An external power brick works globally by accepting anything from 100 to 240 volts. The Space Heater is expected to start shipping in April 2014.

# Bootsy Collins...helming the Funkship in the 'Firefly Zone'

The iconic Bootsy Collins is happy to report he has been flying in what he refers to as the 'Firefly Zone' these days. Bootsy recently added Radial's premium Firefly tube DI to his gear arsenal. The cheerful yellow box has been getting a lot of attention since its debut and Collins includes himself as a fan.

*"I am using the Firefly in both my studios with my new Warwick-Star-Spacebass. The Firefly is pleasantly warm, while it can get very chunky and funked up, it also can be punchy and clean, so whatever the scheme, the Firefly can funk up a bad dream, or a wet one, (laughs). As you know, I use a lot of effects and the Firefly allows them to breathe instead of decreasing or animating the true sound of whatever I throw at it. It does not break up or change the tone unless I want that... and in some cases I do. The Firefly gives you everything needed to adjust to any situation."*

*Firefly Part# R800 2020 00  Retail: $700 USD*



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# These pages are crawling with bugs...

## You will want these little guys in your road kit

### StageBug SB-1™ Active Acoustic Direct Box

The StageBug SB-1 is an active direct box, optimized for acoustic guitar and bass. It features a standard instrument input with a thru-put that can be used for a stage amp or to connect to a tuner. A -10dB pad also enables the SB-1 to be used with higher output sources such as active basses and keyboards. The balanced XLR output is used to feed the PA. This is equipped with a 180° polarity reverse to help tame hot spots on stage and reduce feedback. Best of all, the design is super compact so that it fits inside a guitar case! This makes it easy to carry and at the ready to deploy anywhere – anytime!

Radial's Sales Manager Roc Bubel explains: *"Radial already makes more types of direct boxes than any other manufacturer so adding another model to our line up is not something we would do unless we had good reason. In this case, it really came down to getting inside the case! Today, more and more musicians are traveling light in order to keep costs down. This is particularly important since airlines are now charging for extra baggage. The other reality is that most venues or clubs tend to have low-end DI boxes that do not sound very good. So more musicians are now equipping themselves with their own DI to ensure they can deliver as good a quality signal as possible to the PA system. We combined these two 'needs' to create the StageBug SB-1... the most compact yet high performance Radial DI ever!"*

### StageBug SB-2™ Passive Direct Box

The StageBug SB-2 is a passive direct box designed for high output instruments like active basses, keyboards and drum machines along with other buffered sources like DJ mixers, computers and CD players. It features an instrument input, a thru-put to feed an onstage amp or personal monitoring system, plus a transformer isolated output. The custom made Eclipse transformer performs the balancing and impedance matching for optimal signal transfer. And by isolating the source from the destination you also enjoy lower noise. Features include an input pad to reduce sensitivity plus a pin-1 lift switch to eliminate ground loops.

According to Radial's Western Regional Sales Manager Mark Gummer:*"We have noticed a trend whereby musicians are looking for ways to reduce the size of their payload when traveling from gig to gig. This is happening both regionally when traveling on a tour bus and nationally when traveling by commercial airliner. In both cases, the attempt to downsize results in lower fuel costs, lower baggage handling costs and ultimately the reduction in size improves efficiencies all around. But as always, musicians want it all. They want smaller, but do not want to compromise on quality. The new StageBugs deliver big sound in a small way! And the response we have had so far has been terrific!"*

### StageBug SB-48™ Power Bar 48V Phantom Supply

The StageBug SB-48 Power Bar, a dual channel 48V phantom power generator, is designed to power microphones and direct boxes when phantom power may not be at hand.

Radial's Service Manager Paul Blake explains: *"We sometimes get calls from artists who want to use a clip-on instrument microphone with devices like the popular Radial PZ-Pre acoustic preamp. These are usually condenser mics that require 12V to 48V phantom power to make them work. We thought that it would be a good idea to provide a plug and play solution for these users. The SB-48 is just that. You simply plug the SB-48's 15VDC power supply in the wall and it converts the voltage to 48V phantom power, just like a mixing console or studio mic preamp."*

| StageBug SB-1 Acoustic | StageBug SB-2 Passive | StageBug SB-4 Piezo | StageBug SB-5 Laptop | StageBug SB-7 Earmuff | StageBug SB-48 Power Bar |
|---|---|---|---|---|---|
| Part# R800 0110 00 | Part# R800 0120 00 | Part# R800 0140 00 | Part# R800 0150 00 | Part# R800 0170 00 | Part# R800 0148 00 |
| Retail: $80 USD | Retail: $80 USD | Retail: $90 USD | Retail: $115 USD | Estimated Retail: $99 USD | Retail: $100 USD |



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# ...Radial's new compact StageBugs™

## StageBug SB-4 Piezo™ Orchestral DI

The StageBug SB-4 Piezo is a special direct box designed specifically for instruments that use a piezo electric transducer as a sound source element. Piezos are notorious for their peaky response and edgy tone when they do not see a proper load. The SB-4 has been optimized with a 5 meg-ohm input impedance that smoothes out the dynamics while increasing the frequency response for a warmer, more natural tone. The SB-4 has also been equipped with a high pass filter that gently rolls off excessive bass which can cause resonant feedback. This makes the SB-4 a great choice for violin, fiddle, mandolin, upright bass and for expensive guitars where you do not want to cut a hole into the body to mount an active system.

According to Radial's Senior Engineer Dan Fraser: *"Over the past 10 years, our engineering team has been re-evaluating how the direct box is used, what works and where problems continue to cause havoc. The Radial J48 changed the way we loaded the magnetic pickup for a more natural sound and it has become 'standard equipment' on many of the world's most prominent stages - Paul McCartney and The Rolling Stones - to name a few. Then, in 2013 we released the Radial PZ-DI - a direct box that is able to adapt to a wide range of pickups including piezos. The PZ-DI was recently adopted by Rush for a string section and Zac Brown for traditional bluegrass instruments, creating an awareness that when treated properly, piezo pickups can actually sound really good. We felt that it would be great if we could produce a pared down version of the PZ-DI that the traveling artist could carry in his or her gig-bag. This became the StageBug SB-4."*

## StageBug SB-5 Laptop DI™

The StageBug SB-5 Sidewinder is a direct box designed for AV integrators who need a handy 'tool box' solution for connecting laptop computers, iPads and other audio sources to a PA system. The ultra compact design features an integral 5ft cable terminated in a 3.5mm TRS connector to mate with the headphone output from a laptop. The 'sidewinder' gets its name from the attached cleat that lets you neatly wrap the cable when not in use. Completely passive, the SB-5 does not require any powering. You simply connect and it converts the signal to a pair of 1/4" TRS connectors for stereo use or the signal may be summed mono using the XLR output.

According to Radial's President Peter Janis: *"With so many productions now using computers, we felt that the time had come to bring out an additional solution to our range. The StageBug SB-5 Sidewinder is unique in that it has an integral cable and storage cleat which makes it easy to deploy and impossible to lose the cable! There's nothing more painful than trying to find a 3.5mm interface cable when you are in the heat of the action. I also think the super compact design will be of particular benefit to the audio-video tech. These guys travel with their own service kits and having a ready solution in the work case will certainly be welcomed."*

## StageBug SB-7™ EarMuff Headphone Mute

The StageBug SB-7 EarMuff, a unique headphone interface that enables the artist to mute one side of his or her headphones to eliminate bleed when recording. Radial's Corey Phillips explains: *"When recording classical music, violinists will often remove one side of the headphones to uncover one of their ears so that they can better hear their instrument when performing. This generally improves their intonation and tone versus only hearing their performance through 'a set of cans'. This causes a bleed problem whereby the open phone is now being picked up by the ultra sensitive condenser microphone, mixing in with the instrument. The EarMuff solves the problem by enabling the artist to turn off the unused side of the headphone."*

Features include ¼" TRS input, level control, mono blend, mute switch and choice of 3.5mm and ¼" TRS outputs for ear buds or headphones. A handy mic stand adaptor is available to mount the SB-7 onto a mic stand if needed.


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# SW4 Quad Input Switcher™

*Part# R800 8012 00  Estimated Retail: $1000 USD*

## Multi-channel switcher can be configured to back up wireless mic systems, wireless guitars and more

The Radial SW4 is a unique multi-channel switcher for balanced audio signals that enables four input pairs to be switched individually or be linked together to create stereo, tri-channel or quadraphonic switching should the need arise.

Radial's President Peter Janis explains: *"Over the past several years, we have increased our focus on providing various types of switchers for microphones, preamps, guitars, amplifiers and backing tracks. Today, the majority of artists employ wireless microphones in their live shows along with in-ear monitors. More recently, guitarists have been replacing their stage amplifiers with digitally generated devices such as Fractal's AxeFX. Considering most electronic devices employ internal computers to do the work, backup systems are now becoming essential for professional touring. Computers are certainly more stable than they were in days gone by, but on stages where high voltage lighting is abundant, power spikes can pose problems. Another concern is brownouts due to fluctuating power generators that can cause havoc with digital systems. The Radial SW4 is an advanced switcher that can be configured to back up wireless mic systems, wireless guitars, stereo backing tracks or even be used to switch or combine mixing consoles in a festival environment."*

The design begins with four dual-input channels equipped with two balanced XLR-F inputs and an XLR output on the rear panel. Each output is Eclipse transformer isolated, to prevent hum and buzz caused by ground loops, and is capable of handling up to +20dB at 20Hz without distortion for the most demanding pro-audio applications. This is supplemented with top-mounted ground lift switches on each channel. Looking at the front panel, each of the four channels is equipped with a channel-on switch, A/B select with LED indicators, signal presence LEDs and individual trim controls to match the signals. The SW4 is also equipped with a stereo bus that lets the user combine the active outputs to a single mix point and exit the box via two dedicated balanced XLRs. The same bus drives two unbalanced guitar outputs should the SW4 be used with wireless guitar systems. A top-mounted level control enables the tech to adjust the guitar amp output to suit. Finally, each of the four channels may be linked so that they all switch together. You could, for instance, have channels 1 and 2 linked for stereo use and then use 3 and 4 independently. When linked, channels 1 and 3 show up on the left stereo bus while channels 2 and 4 show up on the right. A master mono sum switch on the top cover brings all the active channels on the bus to both outputs. A dedicated mono-summed tuner out on the front panel can be used for monitoring or for tuning guitars. Switching can be performed via the front panel or with the JR-2 remote. This dual function switch is available in a choice of footswitch or desk-top models to control A/B select and master mute. Construction follows Radial's legendary road-worthy construction with 14 gauge steel throughout, baked enamel finish, steel encased switches and steel shafted potentiometers. As with all Radial products, the SW4 is made in Canada and covered by a 3-year transferable warranty.

# The JX62 Six Input Guitar Switcher

*Part# R800 6505 00  Estimated Retail: $1000 USD*

## Built-in DI, amp switcher and headphone cuing in one box!

The Radial JX62 is a six input guitar switcher with two amplifier outputs for live touring.

According to Radial's Central Regional Territory Manager, David 'Shuu' Guidish: *"Before joining Radial, I spent over 17 years on the road as a guitar tech. During this time, it became abundantly clear that a guitar switching system must be easy to use, quiet, dependable and bullet proof to handle the rigors of professional touring. When designing the JX62, the Radial R&D team discussed the feature set with me, along with a number of other touring pros, before putting the pieces together. The combination of a guitar switcher with built-in DI boxes for acoustics and bass, along with an amp switcher and tuner out, truly makes the JX62 a unique and essential piece of gear."*

The Radial JX62 begins with six guitar input channels, each of which is outfitted with ¼" input and a thru connection to feed its own amp or dedicated direct box. A simple ON switch activates the channel and a recessed 'set & forget' TRIM control enables the guitar technician to set all of the levels uniformly should the output from the guitars or wireless systems need adjustment. All channels may be used at once. The trim control on inputs 1 & 2 plays double-duty whereby it can be turned into a DRAG control – to instead adjust the load when using a wired connection to a magnetic pickup. This follows the same award winning class-A circuit topology as used on the Radial JD7 which is used by guitarists such as Carlos Santana, Neil Schon, Steve Vai and John Petrucci. Made from 14 gauge steel with a baked enamel finish, the Radial JX62 is able to withstand the rigors of professional touring. As with all Radial products, the JX62 is made in Canada and covered by a 3-year transferable warranty.



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# The new Relay Xo™

*Part# R800 8025 00 Estimated Retail: $220 USD*

## Mic signal switcher supports in-ear monitor use

The Relay Xo is a mic signal switcher that enables the artist to convert a vocal mic into a talk-back or communication mic so they can converse with system techs, monitor engineers or other band members.

Radial's President Peter Janis explains: *"Over the past few years, live touring has shifted dramatically with the universal use of in-ear monitors. Artists no longer use wedge monitors and side fills and every instrument is piped directly into the ears. The benefit of course is greater control over the mix, consistency from venue to venue, no more feedback to contend with and sound bleeding from monitors into mics is virtually eliminated. Although the benefits cannot be understated, this has also introduced a new problem: band members have no way to communicate with each other. Radial produced a solution in the form of a simple momentary footswitch called the DM1 that is equipped with an XLR input and two outputs. When the footswitch is held down, the mic output toggles from the main PA system to the intercom system, enabling the artist to converse with band members or speak with the techs to adjust their in-ear mix. The DM1 is designed for dynamic mics but falls short when used with condensers or wireless systems. The Relay Xo is basically a glorified version of the DM1 that is designed to sit at the wireless receiver bay and be remotely controlled using a standard momentary footswitch. The Relay 48Xo, now in the planning stages, will also enable condenser microphones to be employed without introducing a huge pop when phantom power is moved around."*

The design begins with a simple XLR-F mic input and two XLR-M outputs. One merely toggles the outputs using the side access A/B switch or connects a remote control such as the Radial JR1 or a momentary switch (like a sustain pedal) to the Relay Xo using either the XLR or 1/4" remote input jacks. Although either a latching or momentary footswitch may be used, the latter is recommended as it prevents accidentally saying things to the audience if left on by mistake. With a momentary footswitch, you need to have your foot on the switch for it to work. A ¼" link output enables a second Relay Xo to be connected for stereo use. Because there are no buffers in the circuit path, the Relay Xo does not produce any form of distortion. There are only a few carefully selected blocking capacitors in line to prevent DC offset problems that could cause clicking in the audio system.

The Relay follows Radial's tradition of using 14 gauge steel throughout along with an internal I-Beam frame to ensure the sensitive PC board will not torque even when subjected to extreme rigors. A book-end design creates a protective zone around the connectors and switches to further prevent accidental damage.

# The JR2-DT custom remote control

*Part# R800 2085 00Estimated Retail: $100 USD*

## Switch enables user to toggle the SW4 and SW8 remotely

The JR2-DT remote is a dual function control switch that enables the user to A/B toggle devices such as the Radial SW4 and SW8 from the comfort of a desk-top position or remotely mute the system.

According to Radial's Custom Shop Manager Ryan Juchnowski: *"Since we launched the Radial SW8 backing track switcher, we have had several requests to produce a custom remote control to enable the user to reach over to switch from one backing track to the other should one of the playback systems fail. We figured that since we were building an updated version of the SW8, it was the perfect time to produce an off-the-shelf solution. The JR2-DT is super compact, uses a standard XLR as the cable interface and is plug and play easy to use!"*

The compact JR2-DT (desk top) features choice of XLR and ¼" remote outputs to suit various setups. There are two switches on the top panel: one switch is labelled A or B, the other mute. Each switch is a latching type that stays engaged until it is depressed a second time. On-board LEDs illuminate to let you know status. These derive their power from the Radial device that is connected, eliminating the need for batteries or local power supply. Construction is 16 gauge steel with baked enamel finish. As with all Radial products, the JR2-DT is made in Canada and comes with a 3-year transferable warranty.

# 5 MINUTES WITH

## Bon Jovi's Bassist HUGH MCDONALD

What is your current stage setup?
*Aguilar DB750 and DB410 amps and Sadowsky 5 string P Basses, Yamaha BB 2025X, Fender Fretless Jazz Bass*

You said you tried a bunch of other DIs before trying the Firefly?
*You name it, I probably used it!*

What was missing with them?
*The WOW factor. I find most high end DIs do a great job, but the Firefly is a step above. If I could put my finger on it, I'd design one and take your business!*

When did you first try the Firefly?
*At a show in front of about 60,000 people.*

What was your immediate reaction?
*A very big smile.*

How do you feel it helps with your in-ear monitors?
*Now the bass is fat, clear and natural sounding.*

What did the monitor and FOH engineers have to say about the sound of the Firefly?
*Refer to question 3!*

***"The Firefly? In 40 years of playing bass, live and in the studio, nothing has been better!"***

Hugh McDonald, Bon Jovi



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# New 500 Series modules!

## The PreMax™ and PreComp™ are the latest additions to the series

The PreMax is a combination low-noise mic preamp and 3 band equalizer jam packed into a single-wide 500 series module. The 'all-in-one' channel strip will be of particular interest to those who require greater density in their production studios or on-air radio broadcast inputs. The feature set includes Radial's super quiet Accustate input control that auto-pads the input while optimizing signal-to-noise. A high pass filter eliminates resonance while a 180° polarity reverse lets you match stereo mics for phase parity. A front panel instrument input lets you turn on the Omniport which in this case is optimized as an instrument input for direct recording of bass, guitar or keyboards.

*TOP: PreMax Preamp 3 band equalizer Part# R700 0112 00 Retail: $350 USD LEFT: PreComp Preamp VCA compressor Part# R700 0114 00 Retail: $350 USD*

According to Radial's Sales Manager Roc Bubel: *"When we started building 500 series products our primary goal was to solidify the standard so that we could create a bunch of useful modules. We started with the Workhorse and mixer, a preamp, compressor and a Reamper. We now offer close to 20 different modules, each of which address a different market niche or price point. The latest in our series is the PreMax. This is designed to bring greater density and affordability to the 500 series format by combining a preamp and EQ into a single space module. At a retail price of $350, we are confident that the PreMax will provide certain segments of the market with the performance and price point to suit their needs."*

The PreComp is a 500 series module that combines a high performance mic preamp with a fully variable, full function VCA compressor. One merely connects the mic, sets the input level and then the compression for instant results! The compact all-in-one module is particularly beneficial for high density setups such as live recording where you want to capture the natural sound of the instrument while ensuring it does not go into the red. Those equipped with a Radial Workhorse can use the Omniport to access the preamp and compressor separately, using them as two separate modules.

Radial's Senior Engineer Dan Fraser: *"The PreComp addresses the need to combine both a preamp with a compressor in a compact, single space module. This provides broadcasters and post production engineers with a quick and easy solution for voice and instrument processing. It is also a Godsend for live recording engineers as it enables them to maximize system density without compromising on performance or control."*

# Reverend Horton Heat

## Keeping it hot in the studio

Eleven albums and several movie, television and video game soundtracks later, The Reverend is currently working on the band's new album. *"I love the Komit Compressor on guitar and vocals and the TankDriver spring reverb interface is great for me as I use spring reverb everywhere. I can record the reverb separately with the TankDriver to give me more control during mix-down. They are both all over our new album."*

A Radial SGI Studio Guitar Interface is also a fixture in his studio: *"I got to meet the guitar techs for the Doobie Brothers, and saw they had an SGI. I asked what it did and the light bulb went on. Now that too gets used all the time. I use it in the studio so I can run the amp off in the next room. That's been a lifesaver on the new album. I can be in the control room and locate the amp 30 feet away and have it cranked all the way up!"*

*Cube 500 series chassis Part# R700 0107 00 Retail: $400 USD. Komit Part# R700 0150 00 Retail: $350 USD. Tank Driver Part# R700 0136 00 Retail: $350 USD.*

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